

THE ROLE OF AGRICULTURE IN THE ECONOMIC
DEVELOPMENT OF A CLOSED ECONOMY

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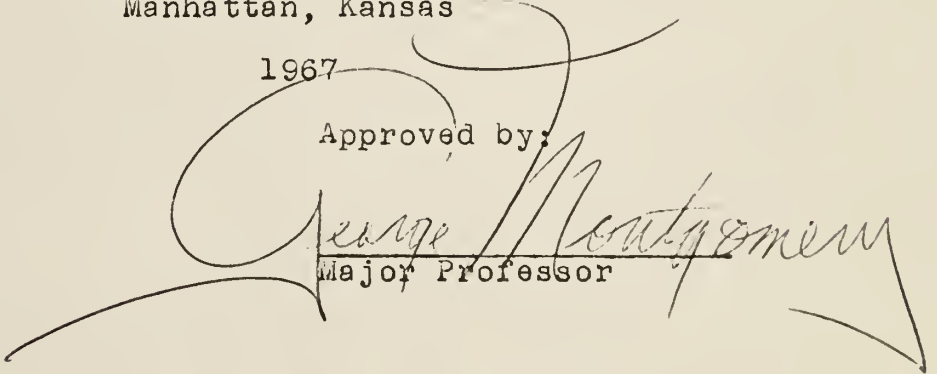
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INTRODUCTION

Economic development is an ambiguous term that can be understood in many ways. Generally speaking, it is a process by which people improve their satisfactions and develop their potentialities. It happens in different countries with diverse material resources and human basis in a different spatio-temporal context. The starting point also diverges from a country to other, and the handicaps are very big. In this report we are going to deal with those countries which have been called poor, underdeveloped or backwards. The differences among them, between only two of them are bigger than the differences among all the rich or industrialized or developed countries. We can find several common features in these countries what would be almost impossible when we dealt in the poor ones. If we could find any common feature in them it would be their dissimilarity: the absence of common characteristics.

The first point we would have to make is that they are not, in the sense that Renán gave the term, nations yet. They have to build a system, eliminate plural societies and isolated economies within the country, and make a political, social, human, economic unity. A process of economic development cannot take place unless there is an economy, and the process of building up an economy is a difficult one. It requires a certain cultural background, certain bases for solidarity, and political union. Without a nation there is not an economy and without an economy there cannot be a

process to develop something that does not exist. Only when there exists an integrated economy and every social group forgets their own private interest and looks for progress for everybody can that base and atmosphere allow a process of growth.

However, there are many groups and societies in the poor countries. From those who are the remainders of a colonial power to those who still follow their ancestral customs and patterns of life. Only those nations which either exterminated the indigenous population or did not have any colonial power on their land are free of plural societies. But these cases are very few and the habits, customs and patterns as well as social, economic, legal and political institutions of the other countries will make that their people do not want progress and change either because the dominant class is too well off to want any change or because the other classes sustain a philosophy of acceptance which discourages changes or material awards.

There are many obstacles to any economic development and the economic are not the most important ones. The economic development of poor countries is more a problem for anthropologists and sociologists than economists. They would have to create a nation first from the multiple and diverse human groups. They would have to build a social order with institutions that allow communication and change of ideas within a certain stability. They would have to create an integrated unity, an organization, an economy, and a political union. This process, previous to any development, would have to be done by means of education and institutional change. Once the human material and institutional framework are settled,

the process has the requisites to a continuous economic development.

In this report we are going to deal with the role of agriculture in the economic development of poor countries.

We will consider the case of a closed economy, that is, an economy without exterior sector. This is a very simplified assumption as many economists considered economic development as a branch of International Trade. It is a fact that many poor countries depend on their development in the exterior sector but, for the sake of simplification, we will limit ourselves to a closed economy leaving for our doctoral thesis the task of finishing up the present report.

In the first chapter we will deal with the problem of agricultural population and its links with economic development. Being the agricultural sector the subsistence one, it is normal that these countries have a high percentage of their population engaged in this sector. The second chapter will lead with the most known of the theories of the role of agriculture in the development process. The first one postulates the existence of disguised unemployment in agriculture and proclaims the need of reallocating that redundant population in the production of capital goods. Several types of underemployment are studied and the expansion path is traced according that model. A second theory emphasizes the need for agricultural improvements in order to get the agricultural surplus for the economic development. The third chapter we will indicate the obstacles that both theories have to face in order to be successful: The persistence of a peasant economy with old

traditions and customs, the role of some landlords who make impossible the education of the farmers and the introduction of new techniques, the existence of plural societies and domination of the political process by one of them, etc. All these factors are obstacles to a market-oriented, commercialized economy which we consider necessary for the economic growth of these countries. Several ways to break down these obstacles are traced, from the ones which pursue large differences in income between the capitalist class and the farmers to the ones which pursue via either a revolution or dictatorship a reform — or "form" — of institutions and an educative process afterwards. The fourth chapter deals with what we consider the main factor in order to create the commercialized agriculture: The educative process.

CHAPTER I.

AGRICULTURE AND POPULATION

1. Agricultural Population and Economic Development.

There is not a universal economic theory and less a universal model of Economic Development. Economic Science deals with human unsatisfactions and the scarce resources that the human-beings have to solve them. Since the human-beings are different depending on their cultural characteristics, race, ideology environment etc and since not all the human groups have the same resources, it is logical that there exist diverse economic development models to deal with the different problems. At one side we have the models that have been developed for the rich and industrialized countries. The most popular of them is the Harrod-Domar model which has been enriched with the contributions of the Duesenberry-Smithies, Tobin- Solom's and Kaldor models. At the other side, some models have recently been built for the poor or backward countries. The most known are those models that defend an unbalanced growth — mainly Liebenstein, Hirschman and Higgins — and the ones that defend a balanced growth — mainly Lewis and Nurkse.

In the models of development for poor countries the main emphasis lays on the balance between capital accumulation and population growth, while in the models of growth for rich countries the balanced between investment and savings is all-important and

the growth of population is treated as constant or shunted aside as a qualification of the main argument.¹ The main difference lays on the role assigned to population. The rapid population growth in the poor countries has led to some authors to think of the existence of a certain relation between poor and overpopulated — in the sense of "too many people". Although this parallelism — as we will see — may be a little misleading, it is a fact that a growing population brakes the process of development. As Paukert says:

"In the developing countries by far the most important use of the gains from economic development was catering for growing population the median value was 55.7 percent, with consumption well behind, an government and investment (roughly equal) still further behind. In the industrialized countries, on the other hand, the most important use of economic gains were increases in per capita consumption, followed by investment, the population use being only third in importance with a median value of 19.1 per cent "²

In 1946, Louis H. Bean showed statistics from a wide range of countries trying to indicate that the higher the population in secondary and tertiary sectors, the higher the per capita incomes in these countries. He presented the existence of a high negative correlation between the ratio of agricultural to total population and development and took this correlation as a demonstration that the high ratio of agricultural to total population was the cause of underdevelopment. On the bases of his study, Bean recommended

¹Jorgenson, D. W. "The Development of a Dual Economy. The Economic Journal Vol. LXXI No. 282. (June 8, 1961) P. 310.

²Paukert, F. "The distribution of gains from economic development: Int'l Labour R. 91 May 65 p. 367 - 392.

to increase the effort in industrialization and to neglect agriculture. One of his most famous conclusions was that

were it possible to industrialize China to the point where the agricultural population was 50 instead of 75 per cent, its per capita income would rise from \$50 to about \$150³

This theory has been relationed, mainly by Viner and Haberler⁴ with the theory of protection in International Trade associated to Mihail Manoilescu. This rumanian economist argued that since the marginal productivity of labor in agriculture was lower than in industry, agricultural countries should establish import restrictions to manufactures in order to stimulate the growth of this sector and by doing so, to reduce the work force in agriculture.

The underdeveloped countries took this theory as granted and looked at industrialization as the only way out of their poverty. This theory has been followed by several agencies of the U.N. mainly E.C.L.A. under the direction of the argentinan economist Raul Prebich.

Viner strongly criticized this view. At the one hand, he indicated the cases of Italy and Spain which did not get a very high per capita income in spite of their industrialization and, on the other hand, the cases of Australia, Denmark, New Zealand. Iowa and Nebraska which had a high income per capita although they are mainly agricultural. This Viner's argument leaves outside that the important question is the ratio of agricultural population to

³Quoted in Viner. International Trade and Economic Development (Glencoe: Ill. Free Press, 1952) p. 64.

⁴Ibid and Haberler "Unemployment in Underdeveloped Countries" in Meier Leading Issues in Development Economics p. 78.

other sectors, being it very low for the countries he cited.

A second critique to Bean's work has been done on the bases that money-income data were misleading as measures of real income, and that the productivity in agriculture is higher than the statistics show.⁵ It is so because the "statistics fail to make allowance for the distinction between farming industry and farmers as a social class." Farmers do more than grow food. They build their own houses, invest in rural improvements etc. Besides the statistics do not usually take into account the differences in price levels in agriculture and industry, differences which can equalize the gap of incomes in both sectors. Usher made these corrections in the case of Thailand and conclude that "in Thailand:

"The net result of these correction is to raise the ratio of farm to non-farm income per worker from about a tenth to about a third. . . . Biases in productivity statistics similar in kind, but not in magnitude or even direction, are probably to be found for other underdeveloped countries."⁶

2. The Role of Agriculture.

Although the physiocrats emphasized land as the main source of wealth, the classics, perhaps as a reaction against them, saw agriculture as a stagnant sector in relation to industry. They stressed the law of diminishing returns, the absence of technological progress in agriculture and the fact that land was a fixed resource. The Marxist inherited this ideas from Ricardo and farmers

⁵Viner, loc. cit. and Dan Usher: "Income as a Measure of Productivity. . ." Economica. Vol. 33 No. 132(November 1966)p. 430.

⁶Usher, loc. cit. p. 433.

were for a time the "rural idiots" or "primitive troglodytes".

As a matter of fact, the economic historians have given a very little importance to agriculture. Nicholls has indicated a Law of Declining Importance of Agriculture

In theory and policy, economists have largely neglected the initial and importance of the production side of agriculture, which they try to make the cart behind the horse.⁷

In practice, most of the poor countries invested in industrialization either for prestige reasons or for following what they thought the western model. This imitation sometimes forgot that the development of the industrialized countries was accompanied by an agricultural growth.

"Because we call the technological revolution the industrial revolution, I think we tend to forget that it was a total technological revolution in which sharp revolutionary changes in agriculture accompanied and even preceded the revolution of change in industry. In fact, it is arguable that the industrial revolution would not have taken place if the agricultural revolution had not gone hand in hand with it."⁸

Lately, several economists have emphasized the role of agriculture in Economic Development. The same Barbara Wards said a little later.

"Agriculture - transformed agriculture - is absolutely crucial in the process of modernization

⁷Nicholls, W.H. An "Agricultural Surplus" as a Factor in Economic Development. Journal of Political Economy. Vol. LXXI N 1 (February 1963) p. 2.

⁸Ward, Barbara. Towards a World of Plenty? (Toronto U. of Toronto Press. 1963) p. 61.

and Kuznets

..it is essential to recognize that successful industrialization depends upon the attainment of an agricultural surplus and that the pace of industrialization is confined by the rate of agricultural progress⁹

We could quote several other famous economists stressing the importance of agriculture. Why the recent economic literature gives such importance to this sector?

At a first glance, it seems that circumstances have obliged economists to think of agriculture. From a world wide perspective, we have the problem of the food insufficiency in many of the under-developed areas due to the population explosion. Summarizing we could say that it took all of recorded time until 1840's for the world's population to reach 1 billion persons. It took less than 100 years to reach the second billion and 30 years the third billion. We pass now of 3.5 billion, by 1980 we shall have another billion and in the year 2,000 the world's population will exceed 6 billion. At the other side, the continuous growth of food production has not been capable of keeping pace with this growth of population. Actually 2/3 of the world's population are suffering hunger and some more have dietary and caloric deficiencies. This problem - as we have already indicated - is more acute in the poor countries where the annual rate of population growth is above 2 1/2 and even more than 3 per cent in countries such as Ceylon, Mexico, Venezuela, El Salvador and Puerto Rico. These countries cannot support their increasing population with their slow growth of na-

⁹Kuznets, Simon. Six Lectures on Economic Growth (Glencoe, Ill. Free Press, 1959) p. 59-60.

tional income. It has been the danger of starvation what has motivated a great deal of studies on economic development and, specifically, on agricultural progress in order to provide enough food for the growing population.

A second reason is purely economic. There is actually a growing consensus that a progressive agriculture is not only basic to provide enough food for the annual increase in population but also a necessary step for any stable and continuous economic growth.

Johnston and Mellor have given the following reasons for an increase in agricultural output in order to get a desired economic development.¹⁰

1. Economic development is characterized by a substantial increase in the demand for agricultural products and failure to expand food supplies in pace with the growth of demand can seriously impede economic growth. This is due to the fact that in the poor countries there is not only high rate of annual population growth but also they have a very high income elasticity for food — 0.6 or more in contrast to 0.2 or 0.3 in industrialized countries — and, consequently, food has a dominant position as a wage-good. If food supplies fail to expand in pace with the growth of demand, the result is likely to be a substantial rise in food prices leading to political discontent and pressure on wage rates with the consequent inflation and adverse effects on economic development.
2. The poor countries suffer from scarcity of both domestic

¹⁰ Johnston, B.F. and Mellor J. W. "The Role of Agriculture in Economic Development" American Economic Review. Vol. L1 No. 4. (September 1961).

capital and foreign exchange earnings. The foreign exchange earnings can be achieved by the development of agricultural export although it is not a good policy in the long run — given the persistent tendency to decline of the price of primary products in the international market — in the short run ^{it} is the fastest method to obtain them. At the other side, given the technological gap which these countries suffer, a comparatively modest doses of capital investment, such as improved varieties of seed, more and better fertilizers, storage facilities etc, may produce spectacular additions to the output of the agricultural sector and, because of the predominant size of this sector in backwards countries, the national product will rise in almost the same proportion as the agricultural.¹¹

3. Given the high density of agricultural population in these countries, agriculture can provide manpower not only to industry and other expanding sectors of the economy but also to capital required for overhead investments.

4. The rising incomes of the farm population should provide a market for the industrial sector. The importance of this aspect has been emphasized by Nurkse who notes that the lack of purchasing power of farm people is one of the main causes for the lack of industrialization. So, any increase in the size of the market would be a very valuable stimulus to industrialization.

¹¹ Cutman, G. O: "A Note on Economic Development With Subsistence Agriculture". Oxford Economic Papers. Vol IX No 3 (October 1957) p. 324.

The trouble is this: there is not a sufficient market for manufactured goods in a country where peasants, farm laborers and their families, comprising typically two-thirds to four-fifths of the population, are too poor to buy any factory products, or anything in addition to the little they already buy. There is a lack of real purchasing power, reflecting the low productivity in agriculture.¹²

¹²Nurkse, Ragnar. Patterns of Trade and Development, Stockholm, 1959 p. 41-2.

CHAPTER II

THEORIES ON THE ROLE OF AGRICULTURE IN
THE DEVELOPMENT PROCESS

There are two main points of view about the way in which agriculture is necessary for a stable economic development. The first one stresses the existence of disguised unemployment in agriculture, that is, the existence of certain surplus labor. This surplus labor if withdrawn from agriculture will provide not only enough supply of hands for the secondary and tertiary activities but also-as their removal would not reduce the output, — an agricultural surplus which could be used to feed the withdrawn surplus labor which is used out of agriculture. The second point of view denies the existence of disguised unemployment and emphasizes the need of improvements in agriculture. These improvements in agriculture would provide not only an agricultural surplus but also the necessary labor to be used in the expanding industry. The urgency for improvements in agriculture is stronger in the second case than in the first one. We have in both cases an agricultural surplus which is needed in order to avoid the pressure on prices that usually has to come in the development process. When this surplus is available, the economic development will occur smoothly and continuously if other possible bottlenecks have been overcome. In this chapter, we deal with both theories leaving for next chapter the task of indicating the institutional obstacles to the development process.

1. Types of Underemployment

Although we can find in the poor countries some of the unemployment characteristic of industrialized economics due to lack of effective demand, we are going to deal with the typical underemployments of backward economics which are mainly due to inadequate productive capacity¹³ or, in Eckaus words

. . . due to market imperfections, limited opportunities for technical substitution of factors — with divergences between the proportions in which goods are demanded and in which they can be supplied with full use of available factors — and inappropriate factor endowments.¹⁴

This kind of underemployment fails to respond to the fiscal measures directed to increase employment by stimulating effective demand typical of rich countries. An expansion of monetary demand, given the rigidity supply of wage goods — mostly food and we have to remember the inelasticity of agricultural production — in the short run, will lead to one of the typical inflation of prices of the underdeveloped world.¹⁵

We can define underemployment with Navarrete as

a situation in which the withdrawall of a certain quantity of the factor labour to other uses, will not appreciably diminish the total output of the sector from which it is withdrawn."¹⁶

¹³Wonnacott, Paul: "Disguised and overt unemployment in underdeveloped countries" Quarterly Journal of Economics. Vol. LXXVI No. 2 (May 1962).

¹⁴Eckaus, R. S. "The Factor Proportions Problem in Underdeveloped Areas" American Economic Review Vol. XLV No6 (September 1955)

¹⁵Nurkse, Ragnar: "Problems of Capital Formation in Underdeveloped Countries" New York: Oxford U. Press, 1953 p. 36.

¹⁶Navarrete, Alfredo and Ifigenia: "Underemployment in Underdeveloped Economics" International Economic Papers No 3. p. 325.

Before dealing with the several types of underemployment, it will be useful to quote some examples of its extent.

Buck indicated that during the years 1929-33 in China only 35 per cent of the men between fifteen and sixty years of age engaged in farming had full-time jobs. In 1939, Warrimer concluded that before World War II in "Eastern Europe as a whole, one quarter to one-third of the farm population is surplus. . .". Next, in 1943, Rosenstein-Rodan revealed that twenty to twenty-five million of the 100 to 110 million people in Eastern and Southeastern Europe were either wholly or partially unemployed. In 1945, Mandelbaum estimated that from 20 to 27 per cent of the active rural workers in Greece, Yugoslavia, Poland, Hungary, Rumania and Bulgaria were redundant.¹⁷ Recent studies show that in the small farm systems of India and the United Arab Republic, between 25 and 35 per cent of owner- occupiers and tenant-farmers are estimated as redundant. In the Philippines a farmer may be fully occupied for four or six months of the year only depending on his crop whole. Martin has estimated that in densely populated areas of Calabar Province in Nigeria a farmer may work for an average of only three hours a day. In parts of Latin America, where one-crop farming predominates, cultivators work for less than 100 days a year. In Bulgaria, where by 1958 collective and State farms had acquired 95 per cent of the agricultural land, the average collective farm worker on forty-nine

¹⁷Quoted in Charles H. Kao, Kurt R. Auschel and Carl K. Eicher in "Disguised Unemployment in Agriculture" in Eicher and Witt's *Agriculture in Economic Development*. (New York: Mc Graw - Hill. 1964) p. 130.

collective farms surveyed in 1957 worked for only 204 1/2 days a year.¹⁸

We can distinguish several kinds of underemployment such as structural, temporal, and disguised.

A. Temporal

There are different classes such as

1. Seasonal: It is due to the seasonal cycle of agricultural production which does not require the same intensity of labor input at all times within the year. This is the most common of all agricultural underemployments.

2. Traditional or Periodic: Barber defines it

when individual members of the family productive unit can be withdrawn for at least a full annual cycle without any sacrifice in indigenous production.¹⁹

It is due to the fact that in a peasant economy the labor force of the family unit are not homogeneous factors of production which are perfectly substitutable for one another. Typically, the adult male is responsible for some well-defined tasks which do not require his energies for substantial periods of time — 1, 2 or even three years.

3. "School leavers": It is an urban underemployment formed by young men from rural areas who, after receiving certain education, are attracted — via demonstration effect — by the town and prefer

¹⁸Quoted in U.N; F.A.O. and I.L.O. Progress in Land Reform: Fourth Report. (New York U.N. Department of Economic and Social Affairs 1966) p. 137.

¹⁹Barber, William J. "Disguised Unemployment in Underdeveloped Economies" Oxford Economic Papers Vol XIII No 1 (Feb. 1961) p.109

to remain unemployed in town rather than back to the peasant life which they now see with disdain.²⁰

B. Structural²¹

It can be due either to factor-market imperfections or to technological restraints.

1. Mainly due to factor-market imperfections assuming that technology is available. In its simplest form it can be described by

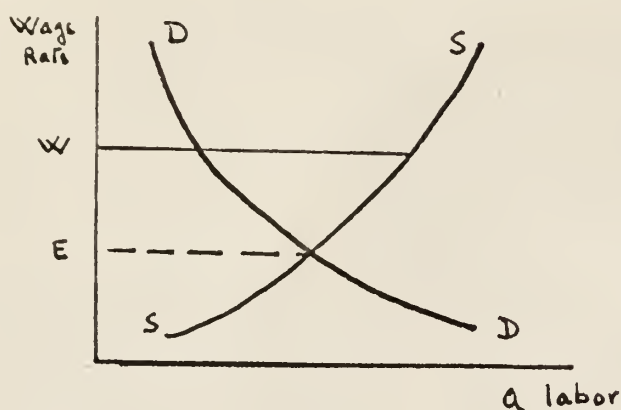


figure 1. The wage rate is settled at w rather than at E as it would be under competitive conditions. This is due to several institutional factors²² such as immobility of labor, lack of information about jobs available,

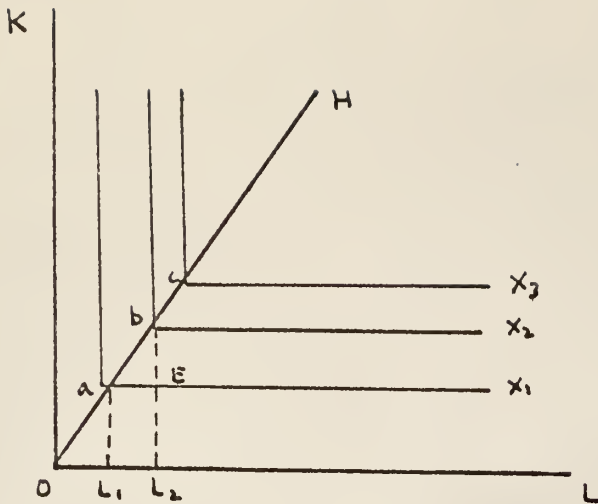
in other sectors, land tenure systems, social consenses etc. In this case the wage rate does not represent factor endowments and leads to an artificial high ratio of the price of labor to the price of capital, what could lead to false policies that use capital intensive investment. This is the typical case of peasants economies or traditional agriculture economies.

2. Technological: It is due to limited technical substitutability of factors. In the simplest case that Eckaus shows, we have one

²⁰Meier, Gerald M. op. cit. p. 84.

²¹See Eckaus loc. cit. and Higgins: Economic Development (New York: Norton 1959) p. 325-333.

²²Fei, J. C. and Ranis, G: Development of the Labor Surplus Economy. Homewood, Ill. Richard D. Irwing, 1964 p. 21-2.



say, at point E, there will be an underemployment of aE . Only if the capital stock were to increase in the amount Eb could the redundant labor be absorbed in this sector. Otherwise it would have to go to other sectors.

Higgins has developed out of this case his theory of "technological dualism". In the traditional sector we would have variable technical coefficients of production being the factor endowment such that labor is the abundant factor, and the techniques of production labor intensive. The advanced sector would have fixed technical coefficients and the factor endowment would lead to capital intensive techniques of production. Historically, as population was growing, the advanced sector could not absorb the greater labor force due to its fixed coefficients and most of the work-force had to go into the traditional sector. This process was going on until the marginal productivity of labor fell to zero or even below. This was the point in which, according to Higgins, disguised unemployment began to appear.

2. Disguised Unemployment

It was Joan Robinson whom coined the words "disguised unemployment" to describe those workers who being laid off from industries adopt inferior occupations.

It is natural to describe the inferior occupations by dismissed workers as disguised unemployment.²³

However the idea of disguised unemployment has come to mean that

...Even with unchanged techniques of agriculture a large part of the population engaged in agriculture could be removed without reducing agricultural output²⁴

and, specifically, that the marginal productivity of labor is zero.

"This is the basic concept which has a clear and unequivocal meaning". "... referring to that amount of population in agriculture which can be removed from it without any change in the method of cultivation, without leading to any reduction in output. The marginal productivity of labor, in other words, is zero"²⁵

Nevertheless this concept has some weakness. The most important of them²⁶ is its failure to distinguish between the amount of labor and number of laborers, more precisely, between the zero marginal product of a worker and the zero marginal product of a

²³Joan Robinson: Essays on the Theory of Employment, 2nd. edition. London 1947 p. 62.

²⁴Nurkse, Raguar. lb. cit. p. 32.

²⁵P.N. Rosenstein-Rodan. "Disguised Unemployment and Underemployment in Agriculture" Monthly Bulletin of Agricultural Economics and Statistics. Vol VI, No 718. July/August 1957. p. 1.

²⁶See Wonnacott, loc.cit. p. 13; Myint, M: "The Economics of Developing Countries" (New York Paper 1966 p. 87 and A.K. Sen, Choice of Techniques Oxford 1960 in Meier, loc cit. p. 83.

worker and the zero marginal product of a unit of labor. We can see this in a simple example. Suppose there are 6 workers in a farm working 5 hours each per day. With this 30 hours of work put into the fixed land, the marginal productivity of the 30 hours falls to zero. The total output will not be changed when some workers are removed if the remain workers work harder and longer in order to make up the total 30 hours a day. So, the problem is not that too much labor is spent or that the marginal productivity of the 30th hour falls to zero, but that there are too many laborers. The real problem is both to determine how many hours a "normal" workers day has and a problem of sacrifice of leisure. The theories which require an increase in the supply of other factors of production seem to miss their point.

The existence of surplus labor under these circumstances is that a fall in the number of working members should be compensated by a rise in the amount of work done per person²⁷

This is recognized by most of the defenders of disguised unemployment such as Lewis²⁸, Nurkse²⁹, Georgescu - Roegen, Ranis and Fei etc.

3. Critics to Disguised Unemployment: Agricultural Improvements.

Haberler, Viner, Schultz and others have strongly attacked the assumption of disguised unemployment. These economists insist in the need for improvements in techniques and methods of cultiva-

²⁷Amartya K. Sen: "Peasants and Dualism with or without Surplus Labor" Journal of Political Economy Vol.LXXIV No 5(Oct. 1966).

²⁸Arthur Lewis, loc.cit. page 141.

²⁹Ragnar Nurkse. loc.cit. page 33.

tion in order to create a surplus labor which could be removed without reducing the agricultural output.

Schultz realized some studies in order to find out whether or not there was disguised unemployment in several countries. He analyzed cases in Peru and Brazil³⁰ but his most important study that of the influenza epidemic of 1918-1919 in India.³¹ In no one of these studies Schultz found disguised unemployment, so he concluded:

The widely notion that a substantial portion of the labor force in agriculture in poor countries has a marginal productivity of zero is an illusion.³⁰

...a part of the labor working in agriculture in poor countries has a marginal productivity of zero... is a false doctrine.³¹

I know of no evidence for any poor country anywhere that would even suggest that a transfer of some small fraction, say, 5 per cent, of the existing labor force out of agriculture, with other things being equal, could be made without reducing its production. I am, of course, ruling out putting new and additional new non-labor resources into farming, the substitution of capital for the labor withdrawn, or the introduction of a better technology.³⁰

Haberler explained what he thinks is wrong with the theory of disguised unemployment by stating:

If it were possible to improve methods of production in agriculture; if the skill of farm laborers is increased; if social habits could be changed, a new spirit implanted and the resistance to moving to and living in cities and to working in factories could be overcome: if technology in industry could be changed so as to employ unskilled rural workers; if capital and other cooperating factors (entrepreneurs, managers, skilled formen, etc) could be provided in larger quantities and better quality; if and

³⁰Theodore Schultz: "The Role of Government in Promoting Economic Growth", in The State of Social Sciences ED. by Leonard White (Chicago Univ. of Chicago Press, 1956) p. 374-5 and 377.

³¹Theodore Schultz. Transforming Traditional Agriculture. (New Haven Yale U. Press, 1963) p. 13.

to the extent that all these things happen or are done, agriculture can release a lot of labor without loss of output, and industrial output be stepped up at the same time.³²

The three authors criticized the hypothesis of limited technical substitutability of Eckaus on which part of the theory of disguised unemployment is based. Schultz merely indicates that "it falls in its relevance"³³, Haberler that it is "preposterous",³⁴ and Viner

As far as agriculture is concerned, I find it impossible to conceive of a farm of any kind on which other factors of production being held constant in quantity, and even in form as well, it would not be possible by known methods, to obtain some addition to the crop by using additional labor in more careful selection and planting of the seed, more intensive weeding, cultivation, thinning, and mulching, more painstaking harvesting, gleaming, and cleaning of the crop.³⁵

A last approach against disguised unemployment is that of Mellor. Although he started, as Schultz³⁶, defending disguised unemployment³⁷, lately has attacked this position.

Contrary to the assumptions of much development theory, there is considerable evidence that increased labor input within the traditional framework of production can increase output significantly in most low income countries and that

³²Haberler, loc.cit. p. 78.

³³Schultz. "The Role of Governmen. . ." loc.cit. p. 377.

³⁴loc.cit. p. 79.

³⁵Viner, J. "Some Reflections on the Concept of "Disguised Unemployment" Indian Journal of Economics Vol XXXVlll, No 148 (July 1957) p. 18.

³⁶U.N. Measures for Economic Development of Underdeveloped Countries. New York .

³⁷Mellor, John and Robert Stevens. "The Average and Marginal Product of Farm Labor in Underdeveloped Economies" Journal of Farm Economics, Vol 38. August 1956 p. 787.

technological advance requires a complementary input of labor³⁸

Mellor supports his thesis under a theoretical model of limited aspirations of the farmers.³⁹ He defends that the farmer in low income countries works hard to achieve a certain traditional community standard of living and has no motivation for increasing his income above that level. He suggests several measures to increase this deficiency of demand such as redistribution of landholdings, decreasing the utility of leisure relative to work, increasing the utility of goods and service income, taxation, increasing the slope and location of the production possibilities curve through technological advance etc. He also indicates⁴⁰ some studies in Japan and India to illustrate that agricultural improvements may require additional labor inputs.

4. The Wage-gap Between Agriculture and Industry.

One of the main arguments against the assumption that the marginal product of labor equals zero is the fact that there is an agricultural positive wage which seem to be in contradiction with the marginal productivity theory of wages. The first idea that comes to mind is that the productivity, although low, is positive, so there has to be a certain wage which will be lower than in industry due to the high productivity of labor in this sector. In

³⁸John Mellor: "The Economics of Agricultural Development" (Ithaca, N.Y. Cornell U. Press, 1966) p. 157.

³⁹John Mellor: "The Use and Productivity of Farm Family Labor in Early Stages of Development" Journal of Farm Economics Vol XLV No 3 (August 1963) p. 519 and ss.

⁴⁰Mellor. The Economics of Agricultural Development. p. 158-161 and 171 - 173.

this respect we showed the studies of Usher and Viner which indicated that agricultural productivity is higher than statistics show. However the followers of the theory of disguised unemployment have given several explanations of this fact.

Some authors have postulated a functional relationship between the worker's efficiency and the wages paid to him. Leibenstein⁴¹ was the first exponent of this idea. According to him, higher wages increase the working vigor via nutrition and therefore workers' efficiency. In this case, the wage-rate cannot be determined by the intersection of supply and demand curves of labor as the supply curve varies with the wage level. Mazumdar has developed a simple model following the Leibenstein lines. In his theoretical analysis he shows that

. . .as the labour supply (in the sense of number of workers) grows relatively to the total demand for labour input in a particular occupation or area, the wage-rate will not be allowed to fall below a certain floor⁴² level if the employers are interested in maximizing profits.

and concludes by saying that

. . .unless the wage level and the value of employment is protected by institutional forces, labour will never be employed at a wage above the marginal product⁴³

Mazumdar arrives at the conclusion that the followers of disguised unemployment interpretation of marginal product is different

⁴¹ Harvey Leibenstein: Economic Backwardness and Economic Growth. New York: Wiley, 1957.

⁴² Dipak Mazumdar: "The Marginal Productivity Theory of Wages and Disguised Unemployment" Review of Economic Studies Vol 26 June. 1959, p. 190.

⁴³ Ibid p. 195.

from that used in the marginal productivity theory of wages. In this last one we have a static concept and in disguised unemployment a dynamic one. In this last case the withdrawal of workers would increase the nutritional level of the remainders and their efficiency.

All this goes back to the distinction that we did between marginal productivity of labor and worker. Wonnacott has showed this ambiguity in elegant terms.

The term "marginal product of labor" is ambiguous here. Although an additional work unit would increase total product and in this sense marginal product is greater than zero, marginal product is "negative" in the sense that if laborers were removed from the work force and if their wages were distributed among other workers, then total production would increase.⁴⁴

B. Other authors, following the Ricardian concept emphasize the existence of an institutional — instead of subsistence — minimum wage. Eckaus derives it from the imperfections of the market. Fei and Ranis attribute this constant institutional wage to the entire non-economic nexus of mores and relationships what lead us to the consideration of a host of environmental factors, such as the land tenure system, family structure, social consensus etc.

C. Lewis postulates that if we want to take workers from a peasant economy, we will have to pay them at least the income that they are receiving in their sector, that is, the average product is the peasant economy. This is due to the fact that in that kind of economy the total product is shared among the members of the family or kinship group. In 1954 Lewis estimated⁴⁵ that a gap of

⁴⁴Paul Wonnacott, loc. cit.

⁴⁵loc. cit. p. 150.

30 per cent or more would be required between both sectors; this estimation was increased to 50 per cent in a later article in 1958.⁴⁶

D. Bishop,⁴⁷ Hathaway⁴⁸ and others have enumerated economic and institutional factors to explain why farmers in spite of lower wage than in non-farm sectors do not want to transfer. Such are the cost of moving, farm skills cannot be transferred to non-farm employment where increasing specialization and skills are needed, the lack of education which ties them to a system of values reactionary to change, absence of adequate employment information of jobs available — several studies have shown that farm people who migrate to cities generally do so on the basis of informal job information from relatives or friends who made the same move earlier —, etc.

E. A last institutional reason for the wage gap is the special nature of agricultural production. These products, being of first necessity, are largely intervened by the Government. It tries to keep their price down, for political and humanitarian reasons, so that any increase of productivity will not lead to an increase in wages.

It is our view that in order to find any satisfactory explanation of the wage-gap, we would have to go to the concepts of the peasant and landlord and commercialized agricultures. This will be done in the next chapter.

⁴⁶"Unlimited Labour! Further Notes. The Manchester School. (January 1928).

⁴⁷"Economic Aspects of Changes in Farm Labor Force" in Iowa State U. Center for Ag. and Ec. Adjust. (pub) Labor Mobility and Population in Agriculture. p. 36-49.

⁴⁸Problems of Progress in the Agricultural Economy (Chicago: Scott & Foresman and Via 1964) p. 80-86 and 109-118.

5. The Expansion Path: Agricultural Surplus

We have seen so far two theories on the role of agriculture in Economic development. The first insists upon the existence of redundant labor in agriculture. If these surplus labor is withdrawn, we will have an agricultural surplus. The second insist upon agricultural improvements in order to create the agricultural surplus. In both cases, we have an agricultural surplus. The logic question is what is the use of this surplus?

We can define agricultural surplus as

. . .the excess of food output over the food needs of the agricultural population, including those who are redundant⁴⁹

. . .the physical amount by which, in any given country, total food production exceeds the total food consumption of the agricultural population⁵⁰

This agricultural surplus is used for capital formation. The two theories indicated can be used in different circumstances. The first will be usually adequate in overpopulated areas, the second will better be applied to sparsely settled countries in which improved agriculture is not only necessary for food purposes but also for releasing work force.

In a country where there is no surplus of labor, industrialization waits upon agricultural improvements the improvement of agriculture and the development thus go hand in hand, but there is nevertheless an important sense in which the former is of prior urgency.

The reverse is the case in a country where population

⁴⁹William H. Nicholls. "An Agricultural Surplus as a Factor in Economic Development." Journal of Political Economy. Vol LXXI No 1 (February 1963) p. 23.

⁵⁰Ibid. p. 1.

is so large in relation to cultivable land, that the land is carrying more people than can be fully employed in agriculture. In such a situation, technical changes will reduce the number of people required per acre and are of no value; investment in agricultural machinery, for example, would be wasteful. . . In this case, a programme of agricultural improvements has to start by developing manufacturing industries which will absorb the surplus population in agriculture⁵¹

In this well-known model, Lewis indicates that while in some countries, as the European, there was a limited supply of labor, with small disguised unemployment or surplus labor and so there we would have to apply a neo-classical model of growth, in other countries such as Asian countries a classical model would be more convenient as there we could find an unlimited supply of labor.

In this last case, we would have to emphasize a growth of the industry such that the expansion of employment opportunities generated in it could absorb the withdrawal of the farm redundant labor. This flow of surplus labor force from farm to industry will tend to prevent any rise in industrial wages and this would lead to a rise in the marginal efficiency of capital in industry. Profits and also the incentives to invest will be raised and, in this way, a cumulative process will be originated.

. . . if unlimited supplies of labour are available at a constant wage rate, and if any part of profits is re-invested in productive capacity, profits will grow continuously relatively to the national income and capital formation will also grow relatively to the national income (*italics mine*)⁵²

There are three points in Lewis' model that we have to consider in detail: the stability of wage rate, the persistence of

⁵¹U.N. loc. cit. p. 59.

⁵²Arthur Lewis: Economic Development with. . . loc. cit. p. 158.

the agricultural surplus and the reinvestment of this agricultural surplus.

1. The stability of the wage rate in which unlimited supplies of labor are available.

There are several forces which will tend to raise the wage rate even in the short run. Lewis recognizes this possibility although he thinks this tendencies could be overcome.

The first force would be that the increasing productivity in the subsistence sector will raise the real wages-average per person in Lewis' sense — and therefore reduce the wage-gap, agricultural surplus and capital accumulation unless — this possibility is very stressed in Lewis' model—, at the same time, there were terms of trade moves against the subsistence sector. This case can clarify in a dualistic agriculture framework. At one side, we have the small-farm peasant agriculture which produces food and, at the other hand, the large-farm advanced agriculture. If this better sector does not produce food, it will have to be done in the traditional or peasant sector, which will only increase its output, via technological improvements, if it responds to capitalistic incentives. It is clear that if agriculture remains stagnant while technological improvements in manufacturing improve very fast, the terms of trade will turn in favor of agriculture. However, when the peasant sector is commercialized it will respond to profits and there will be an increasing technical progress in agriculture. The more rapid this rate of technical progress, the more rapidly the terms of trade will deteriorate for agriculture.⁵³ This is the case

⁵³Jorgenson. loc. cit. p. 330.

defended by Lewis. The rising productivity and, consequently, rising average per person income — that is, real wage — in agriculture will be more than offset by the deteriorating terms of trade. In case the prices do not fall with the increase in productivity, the capitalistic next move will be to prevent farmers from getting all extra production via raising rents against the farmers and taxing them more heavily - as in Japan — or via raising prices of manufactures and heavy taxes — as in Russia.

2. The persistence of agricultural surplus.

We have already seen the way in which the agricultural surplus resulting of technological improvements, can be taken away in case farmers do not respond to the competitive model.

There is another case, widely contemplated for economists, in which the agricultural surplus — due to the persistence of the output as redundant workers leave the land or to improvements in agriculture - can vanish. It can be by an increase in consumption by the farmers who remain in the land. In this case the increasing food demand of industrial and capital overhead workers will press on the prices. This is a very generalized fact in underdeveloped countries that have a large subsistence or peasant sector. These farmers only go to the market to buy those non-agricultural necessities which are inescapable.⁵⁴ In case of a very bad harvest and very low output - case in which the capitalistic farms would go bankrupt-peasants families will work harder and longer in order to produce the necessary marketed surplus to buy their non-agri-

⁵⁴Gutman: loc. cit. p. 325.

cultural necessities. In case of a large output there will be a better level of living by means of the consumption of the output, employing in the market only that part need for their non-agricultural goods.⁵⁵

This type of reasoning will not be accurate in case of commercialized agriculture in which the farmers' reaction will go along the classical or competitive lines.

3. The reinvestment of profits.

It has been showed that when the agricultural surplus is consumed in situ, all the hidden saving potential of disguised unemployment about which Nurkse insisted disappears. In case of peasant economy the agricultural surplus will have to be taken out by means of the government which will reinvest it. In case of a landlord economy, there profits will only be reinvested if the landlords are schumpeterian entrepreneurs. Lewis' model assumes the existence and capitalistic behavior of these landlords, assumption that, as we will show in the next chapter, does not seem likely to occur in poor countries.

Lewis observed a second phase in his model of development. It occurs when, well because of the related circumstances or because the absorption of the surplus labor has been completed, the supply function for labor becomes highly inelastic. Lewis opens his closed economy and by means of immigration to retard the point in which the supply of labor is inelastic. However, this point

⁵⁵Deena R. Khatkhate: "Some Notes on the Real Effects of Foreign Surplus Disposal in Underdeveloped Economies" *Quarterly Journal of Economics*. Vol LXXVI No 2 (May 1962) p. 188-189.

will come and the classical model will be of no use in it. The neo-classical model will have to be applied and with it an increase in wages. What is a logical consequence of neo-classical full employment: Expansion of production in one direction cannot be accomplished without incurring in real cost in another. The poor country passes to be a mature economy and the models of growth of rich countries are to be applied to it.

CHAPTER III.

THE INSTITUTIONAL ASPECTS.

1. The Dualistic Economies

An Economic Theory has to work under some assumptions and postulates. It is so because that economic theory has to be applied to a certain reality, to a certain environment. If this environment is different from the one that is implicit in the postulates, the same measures will have opposite effects. In this part of our report we are going to make a simple classification of the diverse societies or frameworks in the underdeveloped countries and describe their main characteristics. These characteristics are not pure but, usually, mixed up. We do not find a specific society in a particular poor country but plural societies. This fact is far more important in the poor countries than in the rich one^s and highly significant. We only need to take a look on these countries to discover that they are broken up into groups of different individuals, on the basis of multiple factors such as race, geographical origin, social values, cultural differences, etc. which are within the same political unit. In the industrialized countries we hardly can find these plural societies but rather plural features within the same society. The typical case is the United States whose population shows different human elements as the immigrants were from various countries of Europe. However, most of the immigrants had the same European cultural background. This allows an homogen-

eous treatment and certain economic techniques such as mass-production as the social and cultural demand is quite similar. Unfortunately, this is not so in many poor countries where the indigenous population and institutions was not pushed away or exterminated but mixed with the colonial powers or exploited by them. In these societies there is not a common background as there is not a common background between the habitants of the Indian reservations in the U.S.A. and the citizenships of this country. This makes that some economic techniques are not effective because of differences in tastes and desires.

Since most of the body of the existent economic theory was developed with the rise of the capitalistic system.

. . .economists speak of the phenomena characteristic of this system as if they were the economic phenomena par excellence⁵⁶

The fact is that these body of economic theory

. . .deals only with very narrowly defined socio-economic organizations⁵⁶

what was emphasized by Karl Marx who asserted that the traditional economic theory was essentially the theory of capitalism.

This shortcoming is even greater in the American point of view on the development process of poor countries. Heilbroner remarks,

⁵⁶ Emile Grunberg. "The Meaning of Scope and External Boundaries of Economics" in The Structure of Economic Science ed. by Sherman R. Krupp. (Englewood Cliffs: Prentice Hall. 1966) p. 154

As it most naive, this tendency reveals itself in a picture of the ascent as a kind of global process of Americanization⁵⁷

That does not take into account the particular and peculiar institutions and cultural values of other countries.

So, the analytical concepts of the capitalistic-mechanistic model with its basic assumptions on human behaviour cannot be used indiscriminately in the description and policy measures of poor countries in so far as in them do not exist the institutions and hierarchy of values of rich economies. In order to work in those economies we have, first of all, to create the basic system of human relations, the basic system of institutions which allow the capitalistic tools to be effective. It will have to be a decision of the country to choose the economic system it wants. If they choose either capitalism or socialism, an economy will have to be created to have the necessary basis for any development as we cannot develop a economy if it does not exist previously.

It has been a general rule to study the plural societies as if there were only a dual society, a dual economy. It has usually been distinguish a capitalistic or advanced sector and a traditional or indigenous sector. Both of them have different social values working rules, education, cultural background, etc. in a world social system

Every social system has its own economic theory. A social economic theory is always the theory of a special social system. Even if it announces itself as a general theory still it is historically determined. Therefore

⁵⁷Robert Heilbroner. The Great Ascent (New York: Harper and Row, 1963) p. 12.

the economic theory of a dualistic, heterogeneous, society is itself dualistic⁵⁸

The origin of these dual economies goes back to the period of colonialism, and the advanced sector is usually the export sector. This, as Barbara Ward⁵⁹ indicates, is due to the fact that the European countries used them to acquire the raw materials needed to build up their economies. Capital flew to the dominated countries but only to build a local capacity to produce and export. So we have the "milch-cow" economy or l'economie de traite or the economy of the great big holele trouisme — as in the case of the mangauese mines in Ghana, etc. This export sector, still maintained, make these countries perpetually dependant of the exterior sector. It uses capitalistic methods and can compete with the best agriculture of any rich country.

At the other side we have the indigenous economy that we call-peasant economy.

2. The Peasant Economy

Parsons has described it as a economy in which

economic opportunities are natural opportunities, with land as the principal component. The institutions by which land is used are customary working rules; such rules are designed to insure survival of the group, not to facilitate the progress of individuals. As a corollary, land is neither sold nor mortgaged. It passes from generation to generation by inheritance⁶⁰

⁵⁸L. H. Boeke "Economies and Economic Policy of Dual Societies" in Meier loc. cit. p. 54.

⁵⁹Barbara Ward. loc. cit.

⁶⁰Kenneth Parsons: "Institutional Aspects of Agricultural Development Policy" p. paper presented at the American Farm Economic Association. August 1966.

The main characteristics are

1. In contrast with the commercialized sector which employs hired hands worked for wages, the peasant sector is compounded by family farms which usually employ no hired wage labor but depends solely on the work of their own family members.⁶¹
2. The objective of the capitalistic farm is to make a profit. There is not a real profit-seeking as leit-motive in the peasant farm but rather to get a balance or equilibrium between the degree of satisfactions of family needs and the degree of drudgery of labor.⁶¹
3. In the capitalistic firm exists a functional interdependence among wages (of labor), interest (on capital) rent (for land) and profits (of enterprise), terms which are reciprocally determined. In the peasant farm the term "wages" does not exist, and in its absence the behavior of the peasant farm cannot be accounted for in terms of the theories of the four main factors of production. While the distribution of income follows an objective method in the capitalistic farms, in the peasant economy the gross income is divided up by subjective judgment of the head of the family.⁶¹
4. A capitalistic farm can get objective, quantitative evidence about how to proceed while the peasant farm proceeds by subjective evaluation based on the long experience in agriculture of the living generation and its predecessors what means a certain degree of stationary technology.⁶¹

⁶¹A. V. Chajjanov: The Theory of Peasant Economy: Thorner, Kerblay, Smith eds. Hanewood, Ill. The American Economic Association. Richard Irwin. 1966.

5. Boeke⁶² indicates the "limited needs" of the peasant farm in contrast with the unlimited needs and wants of the capitalist ones. This characteristic leads to the somehow constant marketed surplus that we consider before and to the Mellor's model of limited aspirations.

6. A last characteristic is noted by Sen⁶³. He wrote that usually the capitalistic farms have cheaper access to capital which leads to the ownership of the more fertile land, while the peasants have cheaper access to labor. So there are different allocational advantages in either side, the capitalistic will be extensive, commercial and mechanized" and the peasant "small scale and labor intensive".

Several consequences can we deduce from these characteristics. In general peasant family will get more output — as the statistics for India show⁶⁴ — but less savings and the marketed surplus will be smaller for smaller farms. Generally, it is also assumed that peasant farmer has a less efficient set of production function as

- a) he might not have access to economies of large scale.
- b) he might not have the necessary know-how or access to the same factors of production, and
- c) he might be faced to impossibility of experimentation with new

⁶²loc. cit. p. 56.

⁶³Studies in the Economies of Farm Management (1954-1957) New Delhi. Directorate of Economics and Statistics. Ministry of Food and Agriculture. 1959 p. 57.

⁶⁴Dharm Narain: "Distribution of the Marketed Surplus of Agricultural Produce by Size-level of Holding in India, 1950-51." Occasional paper No. 2. Institute of Economic Growth. (Bombay Asian Publishing House, 1961) quoted in Khatkhate. loc. cit. p. 188.

techniques because the precarious nature of his existence makes him more adverse to taking risks.⁶⁵

The classics stressed the importance of the first factor in order to get large-scale farming, however, recently the b and c aspects have received greater importance, mainly

where technically superior factors of production are a principal source of agricultural growth⁶⁶

We have described the peasant economy. It forms a real society, with their customs, ideas and techniques. If we agree with Georgecu-Roegen⁶⁷

As soon as we realize that for economic theory an economic system is characterized exclusively by institutional traits, it becomes obvious that neither Marxist nor standard theory is valid as a whole for the analysis of a non-capitalistic economy⁶⁸

We would have for a economic theory of the peasant -we could use in it many concepts of the capitalistic economic theory, but only those that as the concept of production function have a purely physical nature. Chajanov tried to find this new economic theory- which, he wrote, would have the same relationship to present-day economics as Lobachevskii's geometry bore to that of Euclid. Thorner remarks⁶⁹ that as Lobachevskii gave up the assumption of parallel

⁶⁵Amartya K. Sen. "Peasants and. . . loc. cit.

⁶⁶T. Schultz. "Transforming Traditional Agriculture" loc.cit. p. 189.

⁶⁷T. Schultz. "Transforming Traditional Agriculture" loc. cit. p. 189.

⁶⁸"Economic Theory and Agrarian Economics" in Eicher and Wilt "Agriculture in Economic Development" loc. cit. p. 147.

⁶⁹"Chajanov's Concept of Peasant Economy" in "The Theory of Peasant Economy" loc. cit. p. XV.

lines, we would have to drop wages.

3. The Landlord Economy

The policy of some colonial powers was to grant large holdings of land to a few favored individuals well for conquest, well as a prize for given services etc. That is the reason why we find in many poor countries a land tenure structure characterized by very few numbers of landlords who rent many operating units to a large number of worker families who supply all the farm labor.⁷⁰

The effects of this type of structure on agriculture will depend on the specific role that the landlords may play. In this respect we can distinguish a feudalistic and a capitalistic landlord economy.

The feudalistic landlord economy.

A first landlord group that we can find in the underdeveloped countries is the "Ricardian" group. This landlords will try to hold down the earnings of the peasants and get the biggest possible rent from them. This fact will lead to a very low peasant income and to substantial profits for the landlords. As these landlords are supposed to be insensitive to new opportunities they will spend their profits either in luxurious or conspicuous consumption or invest them in "safe" bonds or shares usually in more industrialized countries. As their only interest is to get an income;

. . .with as little trouble from and subject as little fraud by their tenants or farm workers as possible⁷¹

⁷⁰Nicholls, loc. cit.

⁷¹Balogh. loc. cit. 28.

they will

. . . have not interest in seeing knowledge of new techniques or new seeds conveyed to the peasants, and if they are influential in the government, they will not be found using their influence to expand the facilities for agricultural extension⁷²

rather they will cultivate in their holdings those crops and animals which need very little supervision and enable them to absent from the land the maximum of time.

This type of "Anachronistic set-up" will lead to the persistence of the statu quo. The landlords are content with their income, the magnitude of which will depend not on efficiency but on inequality of ownership. Neither the workers will have any incentive to invest in permanent investment in land which they do not own.⁷³

The relation between landlords and farmers will still be as it was in the feudal Europe of the fifteenth century. A "status" world of masters and servants in which a man's worth and his rights and duties depended on his position in the social scale. This is the actual world in many underdeveloped countries although their Constitutions speak of "equality before the law".

In parts of India, where the caste system retains much of its rigour despite the efforts of the government to destroy it, members of superior castes may give cultivating rights, or perhaps simply gleaning rights, on their land to members of inferior castes in return for personal services

⁷²Arthur Lewis, "Economic Development. ." loc. cit. p. 149.

⁷³Balogh. loc. cit. 29 and U.N.: F.A.O; ILO: Progress in land Reform. loc. cit. p. 139.

of a nature explicitly looked upon as degrading and as defining the interior status of those who perform them. In many other Asian countries, the landlord not only retains such control over his tenants' farming as to deprive them of any power of independent decision; he is a seigneur who directs their personal lives as well; commands their presence as servants at his weddings and funerals; demands their labour to rebuild his house and expects them to respect his advice concerning whom their daughters should marry. . . . On the typical Latin American hacienda, by contrast, the colono, the huasipunguero, the yanacóna or the inquilino owes his right to cultivate his minifundia entirely to the labour services he renders. He may indeed be so close to a serf-like dependence that he can be brutally "disciplined" by physical punishment without right or hope of redress.⁷⁴

The only way out for such a situation seems to be a reform of the institution than make it impossible: The land tenure system. This reform should be accompanied with an educative process in so far.

The traditional work relationships and social stratifications are based upon manipulating an uneducated, inartimlate and largely uninterested work force⁷⁵

and the creation of new institutions which unify the society. Whether this is to be done by peaceful or legal means or by Revolution will be discussed in the next part.

The capitalistic landlord economy.

A second landlord group a little difficult to find in the most poor countries but very likely in those countries which are actually involved in a strong development process, is the one whose behavior and actuation was described by Marx and, later, by Schumpeter. Their role is emphasized by Lewis. They

⁷⁴U.N.; F.A.D; ILO. "Progress in Land Reform." loc. cit. p. 147-148.

⁷⁵Thomas A. Carroll, Land Reform as an Explosive Force in Latin America. (Stanford, Calif. for Advanced Study in the Behavioral Sciences, July-August, 1963)p. 19.

. . . think in terms of investing capital productively⁷⁶

and their main concepts are those of efficiency and profit. They will invest their profits either in agricultural improvements or in the industrial sector.

The latter will be the most usual case since the opportunities and returns seem to them^t be bigger in industry and their land continues having as its first value, the value of prestige which comes with its possession. In this case, the agricultural surplus will be reinvested and we will have the adequate level of savings needed for a continuous growth. This process will continue in so far as the landlords exploit their tenants and will be accompanied with an increasing inequality of incomes. The possible danger of this model is the possibility of a social revolution, as actually it is difficult to describe a governmental policy which did not have a welfare or minimum wage policy. The main examples of this economies were the development processes of England and Japan.

4. Agriculture and Political Process

Nicholls admirably showed the transcendental effect that an equalitarian structure of land tenure has in the development of democratic government and agricultural investments in public services and social overhead. The main case was the United States where the admirable land policy already adopted during the first Congress was the master-piece for a long-run land policy which led

⁷⁶ Arthur Lewis. "Economic Development". . . loc. cit. p. 160.

to an equalitarian structure. Given this structure, educational background of the immigrants and elimination of the indigenous sector, the development of agriculture could not follow other way than the successful one. The land, one time free, gave place to the freedom given by private ownership. The framework of private decision allowed an optimum allocation of the agricultural surplus among non-food consumption, non-agricultural investment and agricultural investment, and also to

. . . a democratic socio-political environment in which the government is responsive to demands for the public services which a majority of small landowners want and are willing, through taxes, to pay for.⁷⁷

through the democratic process a nation, whose large majority were farmers with family size holdings, could have confidence in their representatives and achieve an optimum rate of direct and indirect public investment in those things that farmers wanted: transportation, education, agricultural research and extension services, banking and credit institutions and other types of social overhead, which were willingly paid with the growing agricultural surplus via taxes. In this way the five essential services of any agricultural development: market for farm products, constantly changing technology thanks to the land-grant colleges and experimental stations, local availability of supplies and equipment thanks to the formative and informative role of the extension services, production incentives for farmers thanks to private owner-

⁷⁷Nicholls loc. cit.

ship and cultural background, and transportation⁷⁸ were soon achieved in the U.S.A. and a commercialized agriculture came into being.

However, this was the exceptional case to the rule. Most of the other countries do not have neither equalitarian structure nor cultural background and institutions which allow a commercialized agriculture. The cultural background is impossible in countries where a peasant economy or indigenous sector still subsists, with their traditionally-bounded values and norms. An equalitarian structure and institutions are impossible where the country is dominated by those who own the land, its most important resource. As we have already indicated the most common case is that of a landlord economy. These landlords, legacy of the colonialistic period, dominate not only the political process of the country, but also the banking, fiscal and any other of its institutions. Any tax on the peasant economy will result in public revenues for landlords who will direct them towards those types of social overhead which primarily benefit them or towards the industry sector which is also likely to be dominated by them. They will probably direct the country towards a close protectionism in order to perpetuate their dominance. Any policy which try to direct public investment to the education of the masses of workers would have very little advantage for the oligarchy. The little savings which workers could save will go into the banks and insofar the landlords have the control of the banking system. They will employ them in their industrial factories, and, with the protectionism, they will charge

⁷⁸Arthur M. Mosher. Getting Agriculture Moving. New York. Praeger, 1966.

enormous high prices for the industrial products of their factories, more so as their market is every time more limited, by the peasants poverty.

Any economic development with this economic framework will be possible only in a very few exceptional cases, -unless the medieval structure is changed. An institutional reform, which creates the necessary equalitarian structure, followed by an educational policy will be needed.

This situation is described by the F.A.O; U.N. and I.L.O. in the following terms

a) social relations have an inertia of their own - a man who has never dared to look his landlord in the eye and is conditioned to tremble at his voice is not automatically made holder by declarations of human equality in remote capital cities and because b) social dependence is usually paralleled by economic dependence, and it is asking a lot of a man that he should assert his dignity and equality at the risk of cutting himself off from a vital source of subsistence.

One cure for a) is drama. Revolutions are most successful in this respect, they provide the opportunity for a critical confrontation between master and servant after which things can never be quite the same again. American colonists and Englishmen never met on quite the same footing after 1776 as they did before, nor did the French nobles and peasants after 1789.⁷⁹

This revolution would have to be done well by means of popular unrest such as the French revolution or by means of a strong dictatorship which is able to make this change as a previous step to establish a democratic and not oligarchic process.

Galbraith has emphasized the need for breaking the existent institutions in these countries as a necessary step for progress.

⁷⁹Progress in Land Reform. Fourth Report. loc. cit. p. 148.

If elimination can be had from no other source, the Marxian alternative will sooner or later be tried. The revolution that is offered here, we should remind ourselves, is less the Russian Revolution than the French Revolution.⁸⁰

Later, when he speaks about the effect of foreign aid for the process of development, he clarifies even more his point

In a country where land and other resources are held by and operated for the benefit of a slight minority, and where the apparatus of government serves principally to reinforce such privilege, aid is not of much use. It will too visibly benefit not the many but the few. Our promise of independent proprietorship is obviously nullified so long as land remains in the hands of the few. And personal liberty and constitutional government have little meaning in countries where government is of the privileged for the rich and corrupt as well.

We have no alternative, in short, but to meet the Marxian promise to be rid of archaic and retarding institutions. I doubt that we can organize revolution. But we can place our influence solidly on the side of reform and movements toward reform.⁸¹

This non-Marxist approach is quite similar to that of another American, this time a neo-marxist—Paul Baran who, after an examination of the social environment and the distribution of political powers characteristic of many poor countries, wrote

The crucial fact rendering the realization of a developmental programme illusory is the political and social structure of the governments in power. The alliance of property-owning classes controlling the destinies of most underdeveloped countries cannot be expected to design and to execute a set of measures running counter to each and all of their immediate vested interests. If to appease the restive public, blueprints of progressive measures such as agrarian reform, equitable tax legislation, etc. are officially announced, their enforcement is willfully sabotaged. The government, representing a political compromise between

⁸⁰"The Poverty of Nations" Atlantic Monthly. October 1962.

⁸¹J. Galbraith. loc. cit.

landed and business interests, cannot suppress the wasteful management of landed estates and the conspicuous consumption on the part of the aristocracy, cannot suppress monopolistic abuses, profiteering, capital flights, and extravagant living on the part of the businessmen. It cannot curtail or abandon its lavish appropriations for military and police establishments, providing attractive careers to the scions of wealthy families and a profitable outlet for armaments produced by their parents — quite apart from the fact that this establishment serves as the main protection against possible popular revolt. Set up to guard and to abet the existing property rights and privileges, it cannot become the architect of a policy calculated to destroy the privileges, it cannot become the architect of economic progress and to place the property and the incomes derived from it at the service of society as a whole.⁸²

No doubt, Baran perhaps exaggerated. However it seems to be clear the need for reform, and the first step should be a land-reform. This is not a smooth reform

unfortunately, some of our current discussion of land reform in the underdeveloped countries proceeds as though this reform were something that a government proclaims on any fine morning — that it gives land to the tenants as it might give pensions to old soldiers or as it might reform the administration of justice. In fact, a land reform is a revolutionary step; it passes power, property, and status from one group in the community to another. If the government of the country is dominated or strongly influenced by the land-holding groups — the one that is losing its prerogatives — no one should expect effective land legislation as an act of grace.⁸³

Many western economists have for long been trying to keep themselves away from the political issues that any economy brings. They seem to prefer the machine of the classical model to the reality of the problems of starvation in many poor countries. Apply-

⁸²"On the Political Economy of Backwardness" the Manchester School, January 1952.

⁸³J. K. Galbraith. "Conditions for Economic Change in Under-Developed Countries", Journal of Farm Economics. November 1951, p. 695.

ing their model to economies in which the individuals' behavior and structure is different can have the opposite effects that the ones desired. It has been the purpose of these chapters to show the system of human interactions on which economic tools have to operate. The Western economists do not like speaking of revolution and confiscation of land. They seem to forget their own history in which some sort of confiscation was not avoided

The natural resources of America, Canada, Australia, New Zealand, South Africa were confiscated from aboriginal tubes. Individual and communal rights of the English peasantry were confiscated piecemeal over the three or four centuries of the enclosure movement. Feudal baronies in France and ecclesiastical properties in England, rice subventions of Japanese samurai, were all confiscated by the State and converted largely to private developmental uses as incidents of the French Revolution, the English Reformation, and the Westernization of Japan. So great was the loot of Bengal that Premier Nehru can speak, with no more than pardonable patriotic exaggeration, of the British industrial revolution of the eighteenth century being financed through the proceeds of confiscated Indian capital⁸⁴

The western countries formed their economies in a process quite similar to the process that the poor countries have to follow if they want to have a commercialized economy, a unique society, an organization for all the citizenships -and not merely habitants- of these countries.

The main problem will be to find out the adequate political structure to carry out the dislocating social change. The required abandonment of traditional values, mores and institutions

the immense institutional transformations, the necessary stimulus of powerful political wills, the revolutionary potential, the social function, the arduousness of the prospect

⁸⁴Martin Bronfenbrenner. "The Appeal of Confiscation in Economic Development" Economic Development and Cultural Change: Vol III No 3 (April 1955).

all point to a single conclusion. It is that the price of development is apt to be the exercise of authoritarian power, both political and economic. . . likely to result in a centralized directorship of effort if the ascent is to be made at all⁸⁵

Koefod goes even further

To be orderly and successful, and not degenerate chaotically to provide opportunities for violence and self-serving demagogues, social transformation requires artful control and sound management. Long-term benevolent dictatorships may be vital for detribalizing customary societies and integrating them into larger national contexts. . . .

The razor's edge dilemma for highly centralized authoritarian governments in charge of basic economic development transformations would be that, perhaps for as long as two or three generations, they must not succumb either to the temptations of personal dictatorship, on the one side, or to the bable of voices on the other. They would have to remain firmly in power and in control until changes of mentality and sophistication could enable their people to undertake the responsibilities of representative constitutional government and modern economic life.⁸⁶

This has been the pattern, more than a French Revolution like, in the development process of many poor countries in the last decades. The danger of personal dictatorship is well emphasized by Koefod. The role of the militars in this process has been well developed by Fickett⁸⁷ in his book of readings and case-studies. Men as Alartuk Kemal in Turkey, Ayob Khan in Pakistan, Gamal Abdel Nasser in Egypt and Fidel Castro in Cuba are enough to show the tendency towards dictatorship in order to form the adequate basis for a growth of the economy. Others men, as Franco in Spain, are in the last period that Koefod indicates. Most of them have been

⁸⁵Robert Heilbroner. loc. cit. p. 20.

⁸⁶Paul E. Koefod. "Some General Problems of Economic Development" Vol. XLII, No 3. August 1966, p. 257-58.

⁸⁷Lewis P. Fickett, Jr. Problems of the Developing Nations. (New York. Thomas Y. Crowell. 1966).

widely criticized by the industrialized countries. These countries are actually looking at the only one case in which the process is being developed by means of democratic process: Chile.

CHAPTER IV.

THE EDUCATIONAL ASPECTS

The Fundamental Role of Education

We have been speaking in chapter III about the main institutions and mental attitudes of poor countries that have to be changed in order to build the new ways of thinking and institutional bases that are necessary for a development according a commercialized economy. We have been mainly dealing with the institutions of agriculture as that is the scope of our report. However these changes in attitudes and institutions is not limited to agriculture but open to all the country framework. It will not be strange now that Fei and Ranis define economic development as

. . .a process through which the individuals comprising a given society learn to improve their institutional framework so that the total real resources available may be fully explored and efficiently allocated to realize the society's maximum growth potential⁸⁸ (*italics mine*)

The two main factors of economic development are then the educational and the institutional. Both are closely related as we cannot build a new and adequate institutional framework unless we have people prepared with the skills necessary to do the job. In a second aspect the educative processes have the mission of educating people to deal effectively with the institutions created.

⁸⁸John C. H. Fei and Gustav Ranis. loc. cit. p. 36.

Otherwise people will still follow their traditional ways and the whole process of reforms will be totally annuled.

If the process of learning is a process of producing changes we will have to teach that changes which lead to an agriculture market oriented; we will have to give them that kind of education that can compete with the traditional way of life. It will be a very slow and difficult task. We will not be able to change a tradition of centuries automatically. It will take many years before the peasants adopt the new knowledge, new skills and new ways of doing things. It will take a long time before the tenants are able to adopt new practices and decisions by themselves. It will take a long time before the farmers adopt in their fields the results of research and, ever more time until they become pioneers in the technological advance.

The importance of peasant education is not limited to the role of "accelerator"⁸⁹ of agricultural improvements. It is essential. The more poor a country, the more traditional a country, the more education it needs. We discussed several models of agricultural organization in the last chapter. Let us know the importance of education in each of them.

The peasant economy lives mainly in the past. It follows the agricultural methods transmitted from generation to generation. In this economy as far as the peasants get the social minimum they need. They will not try any changes or improvement since they are not profit oriented. Besides, from a sociological point of view,

⁸⁹Mosher, loc. cit

the persistence of old patterns, mental and folk costumes and habits make that they disapprove any "new thing" merely because it is new. No progress, not even agricultural improvements will come to this type of economy unless an appropriate education strikes the hidden human potential of these economies. These actual peasants are not only a burden which impedes the take-off of the economy but also a waste, a great amount of resources inappropriately exploited.

When the landlord economy takes the shape of capitalistic-landlord economy, the development will start but it will be difficult to obtain a continuous growth unless some of the capitalistic's profits are invested in the tenant's education as Lewis indicates. It will be not only because of the actual need for social security, social policy, minimum wages legislation will impede a model of development based on differences in incomes — such as the English model — but also because of the need of skilled labour in the development process

Skilled labour may be the bottleneck in expansion, just like capital or land. Skilled labour, however, is only what Marshall might have called a "quasi-bottleneck", if he had not had so nice a sense of elegant language. For it is only a very temporary bottleneck, in the sense that if the capital is available for development, the capitalists or their government will soon provide the facilities for training more skilled people⁹⁰

Georgescu-Roegen has emphasized the scarcity of skilled labour as one of the biggest handicaps to overcome being this move so in the overpopulated countries

⁹⁰ Arthur Lewis: "Economic Development. . . loc. cit. p. 145.

It is a peculiar feature of overpopulated economies that the skilled labour is overburdened with work while the unskilled is loafing most of the time⁹¹

In the feudalistic landlord economy we indicated that the landlords will try to keep the tenants out of education. It will be sometimes necessary a revolution and radical changes in the land tenure system. However, if we really want that the ties for economic and social dependence between landlords and tenants are really broken by those changes, we will have to create organizations with the beneficiaries of the reform in order to provide them with the countervailing power to bargain on equal terms for the economic advantages which landlords may still monopolize.⁹² We will have to educate the tenant for him to see the old landlord not as a master but as another citizen. Many times we will have to teach them in their own language and not in the language of the "mother" country as it has been typical in many recent colonial countries.

2. Agricultural Human Capital

The concept of human capital is not new although the recent stress given to it seems to indicate so. Sir William Petty considered labor as the "father of wealth" which led him to include it in estimations of national wealth around 1691. However, the first truly scientific procedure to find the money value of a human being was devised by William Farr in 1853. Within the framework of the classical economists the study of human capital was

⁹¹"Economic Theory. . . loc. cit. p. 15.

⁹²U.N.; F.A.O.; I.L.O. loc. cit. p. 148.

already started with Adam Smith who considered the skill of a man as a machine that has a genuine cost and returns a profit.⁹³ Say also considered the skills and abilities of men as capital and so did economists as Stuart Hill, Bagehot, Senior and List. However there was a certain reluctance to treat the human capital (Walras, von Thunen) as to do so would be "unrealistic" since human beings - as Marshall said - were not marketable. Nearly all the great economists treated it but they did not fully explore the concept and did not calculate rates of return on investments in human-beings. Most of the studies done were related to the demonstration of the economic profitability of human migration, health investment, economic losses to combatants resulting from war, etc.⁹⁴

It has been very recently that the investment of an human capital has been recognized as one of the most profitable. Schultz, Machlup, Mosher, Solow etc are exponents on this tendency. Several empirical studies in order to find the returns for this kind of investment have been made. The most famous are Tang's study of Japan and the statistical indicators that Harbison and Myers developed of the level of human resource development for 75 countries. The new literature on economic development and the reports and studies of international organizations on this matter have greatly stressed the importance of education mainly in the underdeveloped countries.

⁹³Adam Smith. The Wealth of Nations. New York. Modern Library 1937. p. 101: 259-66.

⁹⁴B. F. Kiker, "The Historical Roots of the Concept of Human Capital" The Journal of Political Economy. Vol LXXIV no 5(Oct. 1966).

In our opinion, most underdeveloped countries are in the situation that investment in people is likely to prove as productive, in the purely material sense, as any investment in material resources, and in many cases investment in people would lead to a greater increase of the flow of goods and services that would follow upon any comparable investment in material capital.⁹⁵

However it is necessary to produce much new knowledge about education in developing countries. The main field for research would be to ascertain which types or kinds of education must receive the highest priority. Several authors have indicated that the problem of illiteracy had to be the first;

People are the common denominator of progress. So, paucis verbis, no improvement is possible with unimproved people, and advance is certain when people are liberated and educated. It would be wrong to disregard the importance of roads, railroads, power plants, mills, and the other familiar furniture of economic development. At some stages of development — the stage that India and Pakistan have now reached, for example — they are central to the strategy of development. But we are coming to realize, I think, that there is a certain sterility in economic movements that stand alone in a sea of illiteracy. Conquest of illiteracy comes first. (Italics mine)⁹⁶

...it is extremely difficult if not impossible to achieve continuing agricultural development with illiterate farmers. More and better education of rural people is necessary to remove inhibitions of tradition and ignorance, to increase the acceptance of desirable changes, to facilitate communication and to ensure continuing progress.⁹⁷

However, the recent development of the literature on agricultural education gives top priority to agricultural extension services and to train skilled personnel. Farmers receive their skills and outlook on life from the environment in which they live.

⁹⁵U.N. "Measures for. . . loc. cit. p.52.

⁹⁶John K. Galbraith. "The Poverty of Nations" loc. cit.

⁹⁷William I. Myers. "The Role of Education in Agricultural Development" in International Explorations of Agricultural Economics ed. Roger N. Dixey (ed.) Ames. Iowa State U. Press, 1964 p. 179.

—family, neighbors — that is to say, from what -Wharton calls non-deliberate education.⁹⁸ In order to face this traditionalistic education it is necessary to deliberate education which transforms and fights against the patterns of life and techniques that the youth get from their village. It has to be a strong and continuous education since, as Mosher indicates,⁹⁹ the youth will have to compete against the authority and prestige of the oldest. This deliberate education would need a special institution dedicated to rural people besides the typical educational institution. This institution is the Extension Service.

3. The Role of Extension Service

The main role of Extension Service would have to be to change the primitive culture of the rural people in the poor countries into a advanced culture. It would have to transform a society based upon tradition, myth and superstition, a self-sufficient society resistant to change in which the habits of the individual tend to be the custom of the community into a society with a way of life based upon application of science, highly adaptable and specialized with maximum division of labor. To transform a society in which wealth is judged by number of wives and livestock and in which tribute is paid to family head to maintain position into an advanced society in which wealth is judged by bank balance and taxes are paid to governamental bodies. To transform a society

⁹⁸Clifton R. Wharton: The Role of Farmer Education in Agricultural Growth. The Agricultural Development Council, Inc. (New York, December 1963).

⁹⁹Arthur Mosher: Getting Ariculture Moving. New York Praeger 66

in which the margin of subsistence and standards of living are low and where consanguine family ties provide social security into an advanced society in which margin of subsistence and standards of living are high and where family ties are conjugal and it is the State which provides social security. To transform a society based on families, closely integrated tribally and in which leadership is hereditary into a individualistic society, closely articulated nationally, and in which leaders are elected. To transform a society with a subsistence economy without profit motive and in which past and present are regarded as important into a society with a cash economy with a strong profit motive and in which present and future are important.¹⁰⁰

The role of extension in the poor countries is not, as we have shown, limited to spread out the findings of Agricultural Experimental stations. Its main role is to make a citizen from a habitant of a poor country. New techniques, know-how, etc will greatly help but it will be a consequence from the diffusion of knowledge. As a matter of fact the agricultural experimental stations should have several branches in private farms through which the findings could be spread out among other farms, given farm people apprehensiveness of any state intervention.

Extension can be carried out in several ways. It can be done by ministries or departments of agriculture as in most of the European countries; by farm organizations as in the Scandinavian

¹⁰⁰J. De Geus. "Community Organizations in Relation to Extension" in Methods and Program Planning in Rural Extension. Penders (ed.) Veuman and Zonen. The Netherlands. 1956.

countries; by advisory services as in Scotland or by universities as in United States.

A point to emphasize is that the education given to the farmer should take into account his characteristics and motives. Teaching should be based on farmer's environment and geographical and race peculiarities. It is worth remembering the questions that Schultz asks:

Are the economic principles taught in the west really susceptible of general application? Or are they culture-bond and relevant mainly to industrial capitalistic countries?¹⁰¹

and, in relation to extension

No single system of extension, no transfer of an established system without adaptation will meet the requirement of an individual country. The approach to providing and improving a system of transmitting knowledge to farmers should be an analysis of the needs or requirements and then appraisals of principles, administrative structure, and procedures of systems effective in other countries.¹⁰²

Summarizing, we have been dealing in this chapter with the educational aspects of agricultural development. The process of education is a process of changes in human behavior. Our main assumption and objective to look for was to integrate farmers in the national economic life. In this sense the process of education was the process of becoming farmers into citizens. In doing so, it was necessary to understand the customary non-market economies and to change them into market economies by the educative process what we considered a prerequisite of development. Without it

¹⁰¹"Economic Value of Education" New York. Columbia U. Press 1963.

¹⁰²George Montgomery: "Education and Training for Agricultural Development" in Herman Southworth and Bruce F. Johnston Agriculture and Economic Development. Ithaca: Corwell U. Press, forthcoming.

the possible agricultural surplus would not go to the market and not continuous development would take place. Education, as a total process, is the corner-stone of economic development.

CONCLUSION

A. OUR APPROACH.

A "theory" is a way of looking at or interpreting the facts that will reveal disconnected and complex phenomena to be manifestations of a simple structure; in other words, a "theory" is a way of arranging and interpreting of facts. However the practical man is usually suspicious of "theory", and his suspicion is justified many times. This is so because of the necessity in all theories to generalize in order to be fruitful. These generalizations are become laws or established truths which are used in all occasions and with different data or phenomena. This is the danger of any theory and the reason why the practical man is suspicious of it.

A second danger in any theory is the use that it makes of language. This is particularly true in Economics. The economics terminology has lost all its emotional and human charge. Essentially human concepts such as wages are only considered in their technical aspects. Economics took its concepts from the popular language and, after refining them, returned them as universal categories instead of the adequate categories for the concrete historical period. It is Sweezy who indicates that Economics has become a complex of relations that make it impossible to reach fundamental man-to-man relations.¹⁰³ At the other hand, most of the

¹⁰³Paul H. Sweezy. "The Theory of Capitalist Development." New York. Monthly Review Press. 1956. p. 1 .

actual body of economics is based on the imitation of the natural or physical sciences and has lost any relation with its main objective: the man. That imitation of the physical sciences, which came after the great advance that they received from Newton, Galilei and Darwin, gave place to a scientifism - in the sense that Hayeck gave the term —, to a social engineering that had its climax in the classic scheme. Perfect model, logical and exact; a great machine guided by men's rational behavior looking for a profit; principle that is false or at least questionable for the actual literature of economics.

A third reason for that sterile form of relativism with regard to theory — mainly social theories — is the existence of value judgments which are involved necessarily in the development of economic ideas. An economic theory is dependent on the political, social and psychological predisposition of their authors. This impact of existential factors on the formation of thought has been emphasized by Manheim¹⁰⁴ and his sociology of knowledge. Economic ideas has to be carefully traced out in the context of social - or class - ideals, tears, aspirations, and objective possibilities of the individuals responsible for those ideas. Frequently, the existential factors give rise to inconsistencies which in turn result in theoretical configurations that falsify reality.¹⁰⁵ This was specially true for the classicals' economic theory which was created to help the economic interest of England.

¹⁰⁴Karl Manheim. Ideology and Utopia (New York: Harcourt, Harvest Books, N. D.)

¹⁰⁵Lawrence Nabers. "The Positive and Genetic Approaches" in Sherman R. Krupp: The Structure of Economic Science. Englewood Cliffs. No 3: Prentice Hall. 1966.

this was more conspicuously true in the field which is sometimes called "the theory of international value", where the problems were expressly treated with reference to their bearing on "gain" or "loss" to England, or on the distribution of gain as between England and the rest of the world.¹⁰⁶

Myrdal generalizes it to all countries by saying

In the same way as the course of economic events and policies in advanced countries always gave rise to new realignments of social and economic theories better fitted to, and closely conditioned by, the immediate historical circumstances, it would be entirely appropriate of the very different events and policies in the underdeveloped countries today were accepted as a challenge to produce new and ¹⁰⁷different theoretical frames for social and economic research.

Given that the economic theory of rich countries has been determined by their own interests

. . .it would be pathetic if young economists in the underdeveloped countries got led astray by the predilections of the economic thinking in the advanced countries. . . .I would instead wish them to have the courage to throw away large structures of meaningless, irrelevant and sometimes blatantly inadequate doctrines and theoretical approaches, and to start their thinking afresh from a study of their own needs and problems¹⁰⁸

and he recommends

. . .the final liquidation of the old laissez-faire predilections and, more specifically, the free trade doctrine and the stable equilibrium approach. Also, the distinction between "economic factors" and "noneconomic factors" will likewise have to be discarded as illogical and, consequently misleading. Economic analysis will have to deal with all the relevant factors if it wants to be realistic; general economic theory will have to become a social theory.¹⁰⁹

¹⁰⁶Jacob Viner. Studies in the Theory of International Trade New York: Haspers & Brothers, 1937. p. 437.

¹⁰⁷Gunnar Myrdal: "Economic Theory and Underdeveloped Regions London. Gerald Duckworth & Co. 1957 p. 102.

¹⁰⁸Ibid. p. 101.

¹⁰⁹Ibid p. 100.

B.

SUMMARY

Our approach in this report has taken into consideration the multiple and complex reality of these countries. We started with an overall picture of the biggest problem: The growth of population in these economies. After studying the theoretical and available theories on the role of agriculture in economic development, we dealt with the institutional and political process which were considered the main obstacles to any take-off.

The main underlined assumption was our belief that a market-oriented agriculture was necessary for any continuous development. To obtain this objective a reform of institutional factors followed by a strong emphasis on education was considered a previous step. The role of profit was stressed in order to create a commercialized agriculture.

However, the author has not developed the possibility of a planned economy. Planned economy that, with a certain degree of freedom of choice, could develop agriculture with a more ethical perspective: The social value instead of profit, public interest instead of private. It has been our opinion that this perspective would need an education level that most of the developing countries are far to obtain. The dangers of a profit oriented economy have been repeatedly showed by sociologists and philosophers and are enough known. Our hope is that the developing countries do not mislead their purpose of development by a purely material vision of it. Our hope for the future is not a humanity that has more but a humanity that is - more; To be and not to have; a man who is

more-man because he has gone by a process of development. The development of all their potentialities material and spiritual. If this is done, men will live in peace, justice and freedom, or, as Saint-Exupery wrote: "If respect for man is established in the hearts of men, then men will eventually succeed in constructing a political, social and economic system which consecrates this respect."

Manhattan, April 8, 1967

REFERENCES

A. Books.

1. Agarwala, A.N. and Singh S. P.(eds). The Economics of Underdevelopment. New York: Oxford U. Press. 1963.
2. Bauer, Peter and Xames, Basil. The Economics of Underdeveloped Countries. Chicago: Chicago U. Press, 1962.
3. Brunner, Edmund and Hsin Pac Yang. Rural America and the Extension Service. New York: Columbia U. Teachers College. 1949.
4. Chajjanov, A.V. The Theory of Peasant Economy. Thorner, E, Kerblay B. and Smith. R.E.F. (eds) Homewood, Ill. The American Economic Association. Richard D. Irwin. 1966.
5. Eicher, Carl and Witt, Lawrence (eds) Agriculture in Economic Development, New York. McGraw-Hill). 1964.
6. Fei, John C.H. and Ranis, Gustav. Development of the Labor Surplus Economy: Theory and Policy. Homewood, Ill. Richard D. Irwin. 1964.
7. Fickett, Lewis P. Problems of the Developing Nations. New York: Thomas Y. Crowell. 1966.
8. Galbraith, John K. Economic Development. Gambridge: Harvard U. Press. 1964.
9. Gittinger, J. Price. The Literature of Agricultural Planning Washington National Planning Association. 1966.
10. Harbison, F.H. and Myers, L.A. Education, Manpower and Economic Growth. New York: McGraw-Hill. 1964.
11. Hathaway, Dale E. Problems of Progress in the Agricultural Economy. Chicago: Scott, Foresman and Cia. 1964.
12. Heilbroner, Robert L. The Great Ascent. New York Harper and Row, 1963.
13. Higgins, Benjamin. Economic Development: Principles, Problems and Policies. New York: Norton, 1959.
14. Hirschman, Albert O. The Strategy of Economic Development. New Haven, Conn: Yale U. Press, 1958.
15. Iowa State University. Center for Agricultural and Economic Adjustment. Labor Mobility and Population in Agriculture. Ames, Iowa State U. Press, 1961.

16. Kuznets, Simon. Six Lectures on Economic Growth. Glencoe, Ill. Free Press. 1959.
17. Leibenstein, Harvey. Economic Backwardness and Economic Growth. New York: Wiley, 1957.
18. Lewis, W. Arthur. Development Planning - The Essentials of Economic Policy. New York: Harper & Row, 1966.
19. Lewis, John P. Quiet Crisis in India. Washington: Brookings Institution, 1962.
20. Lionberger, Herbert F. Adoption of New Ideas or Practices. Ames. Iowa State U. Press, 1960.
21. Meier, Gerald M. Leading Issues in Development Economics. New York: Oxford U. Press. 1964.
22. Meier, Gerald and Baldwin, Robert E. Economic Development, Theory, History, Policy. New York: Wiley, 1957.
23. Mellor, John W. The Economics of Agricultural Development. Ithaca N.Y. Cornell U. Press, 1966.
24. Montgomery, George. "Education and Training for Agricultural Development" in Herman Southworth and Bruce F. Johnston: Agriculture and Economic Development. Ithaca N.Y. Cornell U. Press, forthcoming.
25. Mosner, Arthur T. Getting Agriculture Moving. New York . Praeger, 1966.
26. Myers, William T. "The Role of Education in Agricultural Development" in Roger N. Dixey: International Explorations of Agricultural Economics. Ames. Iowa State U. Press, 1964.
27. Myint, Hla. The Economics of the Developing Countries. New York Praeger, 1965.
28. Myrdal, Gunnar. Economic Theory and Underdeveloped Regions. London: Gerald Duckworth & Co. 1957.
29. Nurkse, Ragnar. Problems of Capital Formation in Underdeveloped Countries. New York: Oxford U. Press, 1953.
30. Parsons, Kenneth H. "Agrarian Reform as a Field of Research" in Agrarian Reform and Economic Growth in Developing Countries. Farm Ec. Div. Economics Research Service. USDA. Washington. March 1962.
31. Randall, Laura. Economic Development, Evolution or Revolution? Boston: Heath, 1964.

32. Rostow, W. W. The Stages of Economic Growth. Mass: Cambridge U. Press, 1960.
33. Schultz, Theodore. Economic Crises in World Agriculture. Ann Arbor, Mich: U. of Michigan Press, 1965.
34. Economic Value of Education. New York Columbia U. Press. 1963.
35. Transforming Traditional Agriculture. New Haven. Yale U. Press, 1964.
36. "The Role of Government in Promoting Economic Growth" in Leonard D. White: The State of Social Sciences. Chicago U. of Chicago Press. 1956.
37. Sweezy, Paul M. The Theory of Capitalist Development. New York. Monthly Review Press, 1956.
38. Viner, Jacob. International Trade and Economic Development Glencoe, Ill. Free Press, 1952.
39. Ward, Barbara. Towards a World of Plenty? Toronto: U. of Toronto Press, 1963.
40. Tontz, Robert L. Foreign Agricultural Trade: Selected Readings Ames. Iowa State U. Press, 1966.

B. Documents

41. Food and Agriculture Organization of the United Nations (F.A.O.). Agricultural Planning Course 1963. (Agricultural Planning Studies n°4) Rome: F.A.O., 1964.
42. Mediterranean Development Project: a study and Proposal for Action. Rome: F.A.O., 1959.
43. International Labour Office. Why Labour Leaves the Land, Geneva, 1960.
44. Problems of Employment in Economic Development. Geneva, 1964.
45. United Nations. Measures for the Economic Development of Underdeveloped Countries. New York: U.N. Department of Economic Affairs, 1951.
46. Processes and Problems of Industrialization in Underdeveloped Countries. New York. U.N. Department of Economic and Social Affairs, 1955.

47. V.N.; F.A.O.; I.L.O. Progress in Land Reform: Fourth Report. New York: U.N. Department of Economic and Social Affairs, 1966.

C. Periodicals

48. Balogh, T. "Agricultural and Economic Development" Oxford Economic Papers Vol. XlII No 1 (February 1961).
49. Baran, Paul A. "On the Political Economy of Backwardness" The Manchester School of Economic and Social Studies. Jan. 52.
50. Barber, William J. "Disguised Unemployment in Underdeveloped Economies" Oxford Economic Papers Vol. XlII No 1 (Feb. 1961).
51. Dovring, F. "The Share of Agriculture in a Growing Population" Monthly Bulletin of Agricultural Economics and Statistics. Vol. VIII No 8/9 (August-September 1959).
52. Eckaus, R.S. "Investment in Human Capital: A Comment" Journal of Political Economy Vol. LxxI no 5 (October 1965).
53. Eckaus, R.S. "The Factor Proportions Problem in Underdeveloped Areas" American Economic Review. Vol. XLV No 4. (Sept. 1955).
54. Galbraith, John K. "The Poverty of Nations". Atlantic Monthly October 1962.
58. Georgescu-Roegen, N. "Economic Theory and Agrarian Economics" Oxford Economic Papers. Vol. XlI No 1 (February 1960).
59. Gutman, G.O. "A Note on Economic Development with Subsistence Agriculture" Oxford Economic Papers. Vol. lX No. 3 (Oct. 1957).
60. Hicks, Ursula K. "Learning About Economic Development" Oxford Economic Papers Vol. lX No 1 (February 1957).
61. Hirschman, Albert O. "Investment Policies and Dualism in Underdeveloped Countries." American Economic Review. (Sept. 1957)
62. Jorgenson, Dale N. "The Development of a Dual Economy" The Economic Journal. Vol. LXXI No. 282 (June 1961)
63. Johnston, B.F. and Mellor, J.W. "The Role of Agriculture in Economic Development". American Economic Review. Vol. Ll No 4 (September 1961).
64. Khatkhate, Deena R. "Some Notes on the Real Effects of Foreign Surplus Disposal in Underdeveloped Economies". Quarterly Journal of Economics. Vol LXXVI No 2 (May, 1962).
65. Kiker, B.F. "The Historical Roots of the Concept of Human Capital" Journal of Political Economy. Vol. LXXIV No 5 (October, 1966).

66. Killey, Peter. "Organization and Productivity in Backward Economies" Journal of Political Economy. Vol. LXXVI No 2 (May, 1962).
67. Koefod, Paul L. "Some General Problems of Economic Development" Land Economics Land Economics. Vol. XLIII No3(Aug. 1966)
68. Leibenstein, H. "The Theory of Underemployment in Backward Economies" Journal of Political Economy. Vol. LXV(April,1957)
69. Leibenstein, H. "Underemployment in Backward Economies: Some Additional Notes" Journal of Political Economy. Vol LXVI (June, 1958).
70. Lewis, W. Arthur. "Economic Development With Unlimited Supplies of Labour" The Manchester School. Vol. XXII No 2 (May, 1954).
71. Mathur, Ashok. "The Anatomy of Disguised Unemployment". Oxford Economic Papers. Vol XVI (July, 1964).
72. Mazumdar, Dipak. "The Marginal Productivity Theory of Wages and Disguised Unemployment". Review of Economic Studies Vol. XXVI (June, 1959).
73. Mellor, John W. "The Process of Agricultural Development in low Income Countries". Journal of Farm Economics. Vol XLIV. No 3 (August, 1962).
74. Mellor, John W. "The Use and Productivity of Farm Family Labor in Early Stages of Development" Journal of Farm Economics. Vol. XLV. No 3 (August, 1963).
75. Mellor, John W. "Production Problems and Issues in Agricultural Development" Journal of Farm Economics Vol. XLVlll No 5 (December, 1966).
76. Myint, Hla. "An Interpretation of Economic Backwardness" Oxford Economic Papers. Vol. VI. No 2 (June, 1954).
77. Navarrete, Alfredo and Ifigenia. "Underemployment in Underdeveloped Economies." International Economic Papers No 3.
78. Nicholls, William, H. "An "Agricultural Surplus" as a Factor in Economic Development" Journal of Political Economy. Vol LXXI No 1 (February, 1963).
79. Parsons, Kenneth H. "Institutional Aspects of Agricultural Development Policy". A paper presented at the summer meetings of the American Farm Economics Association, August 21 to 24 1966.

80. Paukert, Felix. "The Distribution of Gains from Economic Development" International Labour Review. May, 1965.
81. Rosenstein - Rodan, P. N. "Disguised Unemployment and Under-employment in Agriculture" Monthly Bulletin of Agricultural Economics and Statistics. Vol. VI. Nos 7/8 (July-August 1957)
82. Rosenstein - Rodan, P.N. "Problem of Industrialization of Eastern and South-Eastern Europe" The Economic Journal. Vol. 53 (June-September, 1943).
83. Schultz, Theodore W. "Investment in Human Capital" American Economic Review. Vol. LI No 1 (March, 1961).
84. Sen, Amartya K. "Peasants and Dualism with or without Surplus Labor" Journal of Political Economy. Vol. LXXIV No 5 (October, 1966)
85. ✓ Tang, Anthony. "Research and Education in Japanese Agricultural Development 1880 - 1938. The Economic Studies Quarterly. No 2 and No 3 (February and May, 1963)
86. Thorner, D. "A Post-Marxian Theory of Peasant Economy: The School of A. V. Chayanov. Economic Weekly. Annual 1965.
87. Usher, Dan: "Income as a Measure of Productivity. Alternative Comparisons of Agricultural and Non-Agricultural Productivity in Thailand. Economics. Vol. XXXIII No. 132 (November, 1966).
88. Viner, Jacob. "Some Reflections on the Concept of "Disguised Unemployment" Indian Journal of Economics Vol. XXVLI No 148 (July, 1957)
89. Wharton, Clifton R. "The Role of Farmer Education in Agricultural Growth" An Agricultural Development Council Paper. New York.
90. Wonnacott, Paul. "Disguised and Overt Unemployment in Under-developed Countries" Quarterly Journal of Economics. Vol. LXXVI No 2 (May, 1962).

THE ROLE OF AGRICULTURE IN THE ECONOMIC
DEVELOPMENT OF A CLOSED ECONOMY

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AN ABSTRACT

As economic development cannot occur without any economy. We have defined what poor countries have to do in order to build an economy in our Introduction. Sociological, anthropological and political considerations are basic in this process and a definition of economic development is given taking into account these aspects.

The first chapter is dedicated to the importance that the agricultural sector has in an underdeveloped country with special considerations in overpopulated countries where the annual growth of population stands in the way of any growth of income.

The second chapter deals with the theoretical aspects and economic models which assign different roles to agriculture in the economic development. Several types of underemployment, typical of these countries are studied and special consideration is given to the concept of disguised unemployment. Several authors, Lewis, Nurkse, Ranis and Fei etc. have built their models on the assumption of redundant — disguised unemployment — labor force in agriculture which can be withdrawn from agriculture without reducing output. The agricultural surplus so obtained can be used either in the construction of social overhead capital or in the secondary sector. Other authors, mainly Viner, Haberler and Schultz have denied the existence of disguised unemployment and stress the need of agricultural improvements which allow a labor surplus that can

be used in either of the indicated ways. The expansion path is traced accordingly to these theories.

The third chapter deals with the main obstacles for the development process which are mainly sociological. Several types of societies are studied mainly the peasant economy and the landlord economy and the human groups that they include. Since the political power is usually dominated by an elite or oligarchy in these countries which impedes the development, a reform of the basic institutions that contribute to the anachronistic set up is considered necessary. However these reforms would do more harm than good unless they were accompanied by the education of the masses to deal with the consequences of the reforms. The fourth chapter deals with this problem and recommends the establishment of extension service in these countries. Extension services which would have a wider scope than the typical ones of developed countries..

In the Conclusion we justify our interdisciplinary approach on the basis of the gap between the economic theory developed to fit the needs of the well-structured economies of the rich countries and the reality of the poor countries which is completely different to those of rich countries.

